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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/575,964

05/02/2007

Michael Baldischweiler

BALD3012/JJC/PMB

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625 SLATERS LANE

FOURTH FLOOR

ALEXANDRIA, VA 22314-1176

EXAMINER

ZELASKIEWICZ, CHRYSTINA E

ART UNIT

PAPER NUMBER

3621

MAIL DATE

DELIVERY MODE

12/07/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

DETAILED ACTION

Acknowledgements

1. This action is in reply to the Amendment filed on October 12, 2010.
2. Claim 8 was cancelled.
3. Claims 1-7 and 9-25 are pending.
4. Claims 1-7 and 9-25 have been examined.
5. This Office Action is given Paper No. 20101203 for references purposes only.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-4, 6-7, 10, 14-22, and 24-25 are rejected under 35 U.S.C. §103(a) as being unpatentable over Hurta et al. (US 5,602,919) in view of Moritsu et al. (US 2002/0049670).

Claims 1, 17

8. Hurta discloses the following limitations:

- a. at a first time (t1) (phase A, see C8 L1-27, figure 5), receiving a data record (transfer data representing toll amount, see C5 L14-20) assigned to the service (paying tolls, see abstract) from an owner's personal electronic payment device (user's smartcard **66**, see abstract, C2 L59 – C3 L2), directly or indirectly by a personal electronic device of the owner;
 - b. wherein the electronic intermediate carrier (transponder **14**, see abstract, C2 L59 – C3 L2) is formed as a transferable unit physically separate (see figures 1-2) from the owner's personal electronic payment device or personal electronic device.
9. Hurta does not disclose the following limitations:
- c. At a second time... correctly;
 - d. Deleting... transactions.
10. Moritsu teaches the following limitations:
- e. at a second time (t2) which is later than the first time (t1), checking the data record (payment intention, see [0062]) or data derived therefrom in the electronic intermediate carrier (IC card, see [0062]) by a receiving device of the payee as to whether the service was rendered correctly (payment intention successfully sent, see [0062]);
 - f. deleting (deleted, see [0062]) or invalidating the data record (payment intention, see [0062]) completely or with regard to the data derived therefrom in the electronic intermediate carrier (IC card, see [0062]) if the service was rendered correctly, so as to prevent the data record from being used several

times for payment transactions (prevents beneficiary system from making copies, see [0062]).

11. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the smartcard-based transponder system of Hurta with the deleting of a data record of Moritsu because 1) a need exists for a smartcard-based transponder that can accept money from a smartcard (Hurta C2 L1-33); and 2) a need exists for an electronic payment system that reduces the burden on the payer and recipient (Moritsu [0009-0010]). Checking the data record will verify whether service was rendered correctly (i.e. a valid data exchange has occurred) (see Hurta C3 L3-19, C6 L3-51); and deleting the record will ensure it is not used again for payment purposes (Moritsu [0062]).

Claim 2

12. Hurta in view of Moritsu discloses all the limitations above. Furthermore, Hurta discloses the following limitations:

g. transmitting the data record (transfer data for toll, see C5 L14-20) or data derived therefrom from the electronic intermediate carrier (transponder, see C6 L3-51) to the payee (interrogator of toll plaza, see C6 L3-51).

Claim 3

13. Hurta in view of Moritsu discloses all the limitations above. Furthermore, Hurta discloses the following limitations:

- h. securing the data record cryptographically (encrypted MAC, see C6 L28-34).

Claim 4

14. Hurta in view of Moritsu discloses all the limitations above. Furthermore, Hurta discloses the following limitations:

- i. the data record depends on at least one of individual data of the electronic intermediate carrier (transponder identity or certificate, see C6 L3-51) and a consecutive character string.

Claim 6

15. Hurta in view of Moritsu discloses all the limitations above. Furthermore, Hurta discloses the following limitations:

- j. the data record depends on personal data (PIN, see C8 L5-13) of the owner of the personal electronic payment device.

Claim 7

16. Hurta in view of Moritsu discloses all the limitations above. Furthermore, Hurta discloses the following limitations:

- k. the data record represents at least one amount of money or at least one unit of value (payment method, see C6 L3-19).

Claim 10

17. Hurta in view of Moritsu discloses all the limitations above. Furthermore, Hurta discloses the following limitations:

- l. the data transmission is effected contactlessly (wireless fashion, see C3 L20-38) at least one of the first time (t1) and the second time (t2).

Claim 14

18. Hurta in view of Moritsu discloses all the limitations above. Furthermore, Hurta discloses the following limitations:

- m. visualizing information (show amount last debited, see C4 L56-67) in connection with the data record on the intermediate carrier.

Claim 15

19. Hurta in view of Moritsu discloses all the limitations above. Furthermore, Hurta discloses the following limitations:

- n. Fastening the intermediate carrier (transponder, see C3 L39-52) detachably to an object (vehicle, see C3 L39-52).

Claim 16

20. Hurta in view of Moritsu discloses all the limitations above. Furthermore, Hurta discloses the following limitations:

- o. transmitting from the intermediate carrier to the personal electronic payment device data on the functionality required for transmitting a data record from the personal electronic payment device (smartcard, see C5 L14 - C6 L51) or a personal device to the intermediate carrier (transponder, see C5 L14 - C6 L51).

Claim 18

21. Hurta in view of Moritsu discloses all the limitations above. Furthermore, Hurta discloses the following limitations:

- p. The electronic intermediate carrier is formed as a transponder (transponder, see C3 L39-52).

Claim 19

22. Hurta in view of Moritsu discloses all the limitations above. Furthermore, Hurta discloses the following limitations:

- q. the electronic intermediate carrier (transponder, see C3 L39-52) is set up for repeated transmission of data records (paying tolls on road, see abstract, C3 L1-20).

Claim 20

23. Hurta in view of Moritsu discloses all the limitations above. Furthermore, Hurta discloses the following limitations:

r. the functionality required for transmitting a data record (toll amount, see C4 L56 – C5 L13) from the personal means of payment (smartcard, see C4 L56 – C5 L13) or a personal device to the intermediate carrier (transponder, see C4 L56 – C5 L13) is stored as an application (application, see C4 L56 – C5 L13) on the electronic intermediate carrier.

Claim 21

24. Hurta in view of Moritsu discloses all the limitations above. Furthermore, Hurta discloses the following limitations:

s. the electronic intermediate carrier (transponder, see C3 L39-52) has a display device (LCD **74**, see C4 L56-67) for visualizing information in connection with a data record (amount of money last debited, see C4 L56-67).

Claim 22

25. Hurta in view of Moritsu discloses all the limitations above. Furthermore, Hurta discloses the following limitations:

t. the personal device (smartcard, see C4 L56-67) is an intelligent device having a reading device for near field communication with a transponder (transponder, see figure 4, C4 L56-67).

Claim 24

26. Hurta in view of Moritsu discloses all the limitations above. Furthermore, Hurta discloses the following limitations:

- u. the personal electronic payment device is formed as a chip card (smartcard, see C4 L56-67), or as a security module of a mobile telephone.

Claim 25

27. Hurta in view of Moritsu discloses all the limitations above. Furthermore, Hurta discloses the following limitations:

- v. the receiving device (interrogator, see C3 L20-38) has a checking device (antenna, see C4 L43-55) as well as at least one additional component (central office computer, see C3 L20-38) which provides reference information (accounting information, see C3 L20-38) for checking a data record.

28. Claims 5 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hurta, in view of Moritsu, and further in view of Official Notice.

Claim 5

29. Hurta in view of Moritsu discloses all the limitations above. Furthermore, Hurta discloses the following limitations:

- w. data record with an encrypted MAC, using an encryption method such as DES (see C6 L3-51).

30. Hurta in view of Moritsu does not disclose the following limitations:

- x. encrypting the data record with a public key of the payee.
31. Examiner takes **Official Notice** that it is old and well known in the encryption arts that data may be encrypted by a public key.
32. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the smartcard-based transponder system of Hurta, in view of Moritsu, to include encrypting the data record with a public key of the payee because Hurta already teaches encrypting the data record for security purposes (see Hurata C6 L3-51). Using the payee's public key will ensure proper authorization between the transponder and interrogator (see Hurta C6 L3-51).

Claim 23

33. Hurta in view of Moritsu discloses all the limitations above. Furthermore, Hurta discloses the following limitations:
- y. the intelligent device is a smartcard (smartcard, see C4 L56-67).
34. Hurta in view of Moritsu does not disclose the following limitations:
- z. the personal electronic payment device is a mobile telephone.
35. Examiner takes **Official Notice** that it is old and well known in the computer arts that a smartcard can be utilized with a mobile telephone.
36. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the smartcard-based transponder system of Hurta, in view of Moritsu, to include the personal electronic payment device as a mobile telephone

because a mobile telephone can perform similar functions as the smartcard, such as read, write, and store information (see Hurta C1 L60-67).

37. Claims 9 and 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hurta, in view of Moritsu, and further in view of Tuttle (US 6,013,949).

Claim 9

38. Hurta in view of Moritsu discloses all the limitations above. Hurta in view of Moritsu does not disclose the following limitations:

aa. the electronic intermediate carrier... second time (t2).

39. Furthermore, Tuttle teaches the following limitations:

bb. the electronic intermediate carrier (RFID stamp, see C2 L28-54) is not in the possession of the owner (mailer of stamp, inherent) of the personal electronic payment device at the second time (t2) (item arrives at shipment destination, see C6 L20-49).

40. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the smartcard-based transponder system of Hurta, in view of Moritsu, with the carrier not in possession of the owner of the payment device of Tuttle because 1) a need exists for a smartcard-based transponder that can accept money from a smartcard (Hurta C2 L1-33); 2) a need exists for an electronic payment system that reduces the burden on the payer and recipient (Moritsu [0009-0010]); and 3) a need exists for RFID tags that are efficient in operation and do not require large amounts of

power to operate (Tuttle C2 L1-5). Having the intermediate carrier (e.g. postage stamp) not in the owner's possession allows for easily tracking of a package (Tuttle C1 L29-57).

Claim 11

41. Hurta in view of Moritsu discloses all the limitations above. Hurta in view of Moritsu does not disclose the following limitations:

cc. Using the cashless... mail.

42. Furthermore, Tuttle teaches the following limitations:

dd. using the cashless payment transaction for paying postage for mail (postage stamps and mailing labels, see C2 L18-28).

43. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the smartcard-based transponder system of Hurta, in view of Moritsu, with the cashless payment transaction for paying postage of Tuttle because 1) a need exists for a smartcard-based transponder that can accept money from a smartcard (Hurta C2 L1-33); 2) a need exists for an electronic payment system that reduces the burden on the payer and recipient (Moritsu [0009-0010]); and 3) a need exists for RFID tags that are efficient in operation and do not require large amounts of power to operate (Tuttle C2 L1-5). Using the transaction for payment of mail allows for easily tracking of a package (Tuttle C1 L29-57).

Claim 12

44. Hurta, in view of Moritsu and Tuttle, discloses all the limitations above.

Furthermore, Tuttle teaches the following limitations:

ee. the intermediate carrier (RFID stamp, see C2 L28-54) is fastened detachably to mail (mail, see C2 L28-48).

45. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the smartcard-based transponder system of Hurta, in view of Moritsu, with the intermediate carrier fastened to mail of Tuttle because 1) a need exists for a smartcard-based transponder that can accept money from a smartcard (Hurta C2 L1-33); 2) a need exists for an electronic payment system that reduces the burden on the payer and recipient (Moritsu [0009-0010]); and 3) a need exists for RFID tags that are efficient in operation and do not require large amounts of power to operate (Tuttle C2 L1-5). Fastening the intermediate carrier to the mail allows for easily tracking of a package (Tuttle C1 L29-57).

Claim 13

46. Hurta, in view of Moritsu and Tuttle, discloses all the limitations above.

Furthermore, Tuttle teaches the following limitations:

ff. information on at least one of the time and place of the delivery (destination address, see C2 L28-48) of the mail is stored in the electronic intermediate carrier.

47. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the smartcard-based transponder system of Hurta, in view of

Moritsu, with the time and place of delivery stored in the intermediate carrier of Tuttle because 1) a need exists for a smartcard-based transponder that can accept money from a smartcard (Hurta C2 L1-33); 2) a need exists for an electronic payment system that reduces the burden on the payer and recipient (Moritsu [0009-0010]); and 3) a need exists for RFID tags that are efficient in operation and do not require large amounts of power to operate (Tuttle C2 L1-5). Storing time and delivery information on the intermediate carrier allows for easily tracking of a package (Tuttle C1 L29-57).

Response to Arguments

48. Applicant argues that Hurta does not disclose “receiving...rendered correctly” or “deleting or invalidating the data record” (Amendment p 13-14). This argument is moot in light of the new art above.

Claim Interpretation

49. Examiner finds that because the examined claims recite neither “step for” nor “means for”, the examined claims fail Prong (A) as set forth in MPEP § 2181 I. Because all examined claims fail Prong (A), Examiner concludes that all examined claims do not invoke 35 U.S.C. 112, 6th paragraph. See also *Ex parte Miyazaki*, 89 USPQ2d 1207, 1215-16 (B.P.A.I. 2008) (precedential).

gg. Should Applicant amend the claims to recite “means for”, Applicant is respectfully reminded that the specification must have proper antecedent basis

for the claimed subject matter. See 37 C.F.R. § 1.75(d)(1), MPEP § 608.01(o), and MPEP § 2181 IV.

50. After careful review of the original specification and unless expressly noted otherwise by Examiner, Examiner concludes that Applicant is not his own lexicographer. See MPEP § 2111.01 IV.

51. Examiner hereby adopts the following definitions under the broadest reasonable interpretation standard. In accordance with *In re Morris*, 127 F.3d 1048, 1056, 44 USPQ2d 1023, 1029 (Fed. Cir. 1997), Examiner points to these other sources to support her interpretation of the claims.¹ Additionally, these definitions are only a guide to claim terminology since claim terms must be interpreted in context of the surrounding claim language. Finally, the following list is not intended to be exhaustive in any way:

hh. **device** “A generic term for a computer subsystem.” Computer Dictionary, 3rd Edition, Microsoft Press, Redmond, WA, 1997;

ii. **element** “n. 1. Any stand-alone item within a broader context. For example, a data element is an item of data with the characteristics or properties of a larger set.” Computer Dictionary, 5th Edition, Microsoft Press, Redmond, WA, 2002;

jj. **subsystem** “(3) (software) A secondary or subordinate system with a larger system.” IEEE 100 The Authoritative Dictionary of IEEE Standards Terms, 7th Edition, IEEE, Inc., New York, NY, Dec. 2000;

¹ While most definitions are cited because these terms are found in the claims, Examiner may have provided additional definition(s) to help interpret words, phrases, or concepts found in the definitions themselves or in the prior art.

kk. **system** “n. Any collection of component elements that work together to perform a task. Examples are a hardware system consisting of a microprocessor, its allied chips and circuitry, input and output devices, and peripheral devices; an operating system consisting of a set of programs and data files; or a database management system used to process specific kinds of information.” Computer Dictionary, 5th Edition, Microsoft Press, Redmond, WA, 2002; and

ll. **unit** “(3) A software component that is not subdivided into other components.” IEEE Standard Computer Dictionary, The Institute of Electrical and Electronics Engineers, New York, NY, 1990.

52. Note, in this case claim 1 is a method claim that recites the limitation “receiving a data record assigned to the service from an owner’s personal electronic payment device.” Because the limitation receives data from an electronic device, Examiner interprets claims 1-7 and 9-16 as tied to a machine.

53. Note, in this case claim 17 is a system claim that recites the limitation “a personal electronic payment device.” Because the system claim includes an electronic device, Examiner interprets claims 17-25 as requiring hardware, and not directed to software alone.

Conclusion

54. Applicant’s amendment filed on October 12, 2010 necessitated the new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE**

FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

55. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

56. Because this application is now final, Applicant is reminded of the USPTO's after final practice as discussed in MPEP §714.12 and §714.13 and that entry of amendments after final is *not* a matter of right. "The refusal of an examiner to enter an amendment after final rejection of claims is a matter of discretion." *In re Berger*, 279 F.3d 975, 984, 61 USPQ2d 1523, 1529 (Fed. Cir. 2002) (citations omitted). Furthermore, suggestions or examples of claim language provided by Examiner are just that—suggestions or examples—and do not constitute a formal requirement mandated by Examiner. Unless stated otherwise by an express indication that a claim is "allowed," exemplary claim language provided by Examiner to overcome a particular rejection or to change claim interpretation has *not been addressed* with respect to other aspects of patentability (e.g. §101 patentable subject matter, §112, 1st paragraph written description and enablement, §112, 2nd paragraph indefiniteness, and §102 and §103,

prior art). Therefore, any claim amendment submitted under 37 C.F.R. §1.116 that incorporates an Examiner suggestion or example or simply changes claim interpretation will nevertheless require further consideration and/or search and a patentability determination as noted above.

57. Applicant is respectfully reminded that any suggestions or examples of claim language provided by Examiner are just that—suggestions or examples—and do not constitute a formal requirement mandated by Examiner. To be especially clear, any suggestion or example provided in this Office Action (or in any future office action) does not constitute a formal requirement mandated by Examiner.

mm. Should Applicant decide to amend the claims, Applicant is also reminded that—like always—no new matter is allowed. Examiner therefore leaves it up to Applicant to choose the precise claim language of the amendment in order to ensure that the amended language complies with 35 U.S.C. § 112 1st paragraph.

nn. Independent of the requirements under 35 U.S.C. § 112 1st paragraph, Applicant is also respectfully reminded that when amending a particular claim, all claim terms must have clear support or antecedent basis in the specification. See 37 C.F.R. § 1.75(d)(1) and MPEP § 608.01(o). Should Applicant amend the claims such that the claim language *no longer* has clear support or antecedent basis in the specification, an objection to the specification may result. Therefore, in these situations where the amended claim language does not have clear support or antecedent basis in the specification and to prevent a subsequent

'Objection to the Specification' in the next office action, Applicant is encouraged to either (1) re-evaluate the amendment and change the claim language so the claims *do* have clear support or antecedent basis or, (2) amend the specification to ensure that the claim language does have clear support or antecedent basis. See again MPEP § 608.01(o) (¶3). Should Applicant choose to amend the specification, Applicant is reminded that—like always—no new matter in the specification is allowed. See 35 U.S.C. § 132(a). If Applicant has any questions on this matter, Applicant is encouraged to contact Examiner via the telephone number listed below.

58. Any inquiry of a general nature or relating to the status of this application or concerning this communication or earlier communications from Examiner should be directed to Chrystina Zelaskiewicz whose telephone number is 571.270.3940. Examiner can normally be reached on Monday-Friday, 9:30am-5:00pm. If attempts to reach the examiner by telephone are unsuccessful, the Examiner's supervisor, Andrew Fischer can be reached at 571.272.6779.

59. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://portal.uspto.gov/external/portal/pair> <<http://pair-direct.uspto.gov>>. Should you

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have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866.217.9197 (toll-free).

/Chrystina Zelaskiewicz/
Examiner, Art Unit 3621
December 3, 2010

/ANDREW J. FISCHER/
Supervisory Patent Examiner, Art Unit 3621